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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,113	09/18/2003	Gabriele Barlocchi	854063.552D1	2816
500 7590 03/26/2008 SEED INTELLECTUAL PROPERTY LAW GROUP PLLC 701 FIFTH AVE SUITE 5400 SEATTLE, WA 98104				
EXAMINER ERDEM, FAZLI				
ART UNIT 2826		PAPER NUMBER		
MAIL DATE 03/26/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/667,113

**Applicant(s)**

BARLOCCHI ET AL.

**Examiner**

FAZLI ERDEM

**Art Unit**

2826

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 11 March 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 8-13 and 21-35.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

FE  
3/23/08

/Thomas L Dickey/  
Primary Examiner, Art Unit 2826

Continuation of 11. does NOT place the application in condition for allowance because:

Applicants assert, "one of ordinary skill would not be motivated to stop the process of Sparks et al. in order to add the missing elements from different structures using different processes." However, Applicants point to no evidence in the record to support this assertion.

Applicants assert, "in order to create a single monocrystalline substrate in Sparks et al., one would have to re-move the highly N-doped layers (see Figures 10a, 10b, and 10c)." However, Applicants point to no evidence in the record to support this assertion.

Applicants assert, "In that case, however, the resulting structure would have a small area." However, Applicants point to no evidence in the record to support this assertion.

Applicants argue, "In contrast, the present claimed structure has no limitation resulting from the use of the formation of channels and diaphragms in a substrate that is monocrystalline in nature, allowing the channels and diaphragms to be formed of any desired dimension." However, each of Applicants' claims recites "a structure [or wafer] COMPRISING..." [emphasis added]. The transitional term "comprising" is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See MPEP § 2111.03. Hence, the fact that certain limitations are not recited in the present claims cannot be construed to prohibit "the use of the formation of channels and diaphragms in a substrate."

Applicants assert, "Another approach would be to bond more substrates together, although the end result would not be a monocrystalline substrate." However, Applicants point to no evidence in the record to support this assertion.

Applicants assert, "it is improper to use a structure disclosed in an intermediate step in combination with other references to achieve the claimed combination." However, Applicants cite no section of the MPEP, no rule, no statute, and no caselaw in support of this assertion.

Applicants argue, "One of skill in the art would not look to the combination of the two Sparks references and the MacDonald patent or the combination of Sparks et al. and Mirza et al. to achieve the claimed monocrystalline structure... There is no teaching, suggestion, or discussion in Sparks et al. that the intermediate structure shown in Figures 6, 7, and 10c was intended to be a final product as modified by Sparks '121 and MacDonald. Nowhere in Sparks et al. '069 is there any teaching or suggestion that the intermediate structure shown in Figures 6, 7, and 10c could or should be modified except as shown in this single reference. A review of both the Sparks '121 and MacDonald secondary references finds absolutely no teaching or suggestion in these references for taking the small feature singled out in these references by the Examiner and applying it to any other process, much less to the Sparks et al. process to achieve the claimed structure." However, a suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as "the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references.... The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *Alza Corp. v. Mylan Laboratories Inc.*, 80 USPQ2d 1001, 1006 (Fed. Cir. 2006), citing *In re Kahn*, 441 F.3d 977, 987-988, 78 USPQ2d 1329, 1340 (Fed. Cir. 2006) (which, in its turn, quotes *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000)). See also *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 80 USPQ2d 1641 (Fed. Cir. 2006) and *Old Town Canoe Co. v. Confluence Holdings Corp.*, 78 USPQ2d 1705 (Fed. Cir. 2006). It is therefore improper to suggest, as applicant does, that if there is "absolutely no teaching or suggestion in these references," there must therefore, as a matter of law, be no "suggestion, teaching, or motivation to combine the relevant prior art teachings." *Alza*, 80 USPQ2d at 1003.

Applicants argue, "The Examiner cites column 5, lines 35-40 and column 2, lines 35-50 of Sparks et al. '069 and column 5, lines 15-25 of Sparks '121, describing that the substrate need to be 'a suitable substrate,' as an inherent 'hint' that a monolithic substrate is somehow desirable." However, as discussed above, the teaching, motivation, or suggestion may be implicit (i.e., may result from inherent "hints") from the prior art as a whole, rather than expressly stated in the references. *Alza*, 80 USPQ2d at 1006; *Kahn*, 441 F.3d at 987-988; *Kotzab*, 217 F.3d at 1370.

Applicants assert, "one would have to remove the N+ areas in order to achieve such a substrate, which is clearly not suggested or expected by Sparks et al. '069 much less the two secondary references." However, Applicants point to no evidence in the record to support this assertion.

It would have been obvious to one of having ordinary skill in the art at the time the invention was made to replace the polysilicon membrane layer 36 in Sparks et al. with an epitaxial membrane layer as taught by Sparks and replace the substrate with monolithic/single crystal substrate as taught by MacDonald et al. in order to have a sensor structure with a better compatibility between the substrate/epitaxial layer and the membrane layer since an epitaxial membrane layer would be better compatible with an epitaxial layer.